

DRAFT COPY FOR

Interview Discussion

**FAX TRANSMISSION****DATE:** August 24, 2004**PTO IDENTIFIER:** Application Number 09/812723  
Patent Number**Inventor:** Laugharn et al.**MESSAGE TO:** Examiner Soohoo**FAX NUMBER:** (571) 273-1147**FROM:** ROPES & GRAY LLP  
Melissa S. Rones, Ph.D.**PHONE:** (617) 951-7653**Attorney Dkt. #:** CVRS-P02-001**PAGES (Including Cover Sheet):** 7**CONTENTS:** Draft Amendments (5 pages) and  
Certificate of Transmission under 37 CFR 1.8 (1 page).

Comment: Enclosed for your review please find a set of draft claim amendments in Application Serial No. 09/812,723. It is my hope that the draft amendments will help shape the discussion during our telephonic interview scheduled for Friday, August 27th at 10am. Please feel free to contact me before then if you have any questions or concerns.

If your receipt of this transmission is in error, please notify this firm immediately by collect call to sender at (617) 951-7653 and send the original transmission to us by return mail at the address below.

This transmission is intended for the sole use of the individual and entity to whom it is addressed, and may contain information that is privileged, confidential and exempt from disclosure under applicable law. You are hereby notified that any dissemination, distribution or duplication of this transmission by someone other than the intended addressee or its designated agent is strictly prohibited.

**ROPES & GRAY LLP**One International Place, Boston, Massachusetts 02110-2624  
Telephone: (617) 951-7000 Facsimile: (617) 951-7050

PTO/SB/97 (12-97)

Approved for use through 9/30/00. OMB 0651-0031

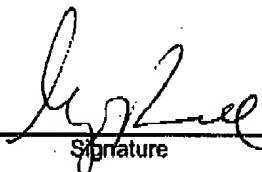
Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

## Certificate of Transmission Under 37 CFR 1.8

I hereby certify that this correspondence is being facsimile transmitted to the United States Patent and Trademark Office

on August 24, 2004  
Date

  
Signature

Ginny Blundell  
Typed or printed name of person signing Certificate

**Note:** Each paper must have its own certificate of transmission, or this certificate must identify each submitted paper.

Draft Amendments (5 pages) and  
Certificate of Transmission under 37 CFR 1.8 (1 page).

**DRAFT – for discussion purposes**  
Application Serial No. 09/812,723

**DRAFT AMENDMENTS**

**CVRS-P02-001**

1-37. (Cancelled)

38. (Currently amended) A method of imparting motion to a fluid, said method comprising,  
providing an acoustic source for generating adapted to generate an acoustic field, which acoustic source has a source frequency of between about 10 kilohertz and about 100 megahertz, and selectively directing said acoustic field to at least one nucleation feature located proximate to a sample located in the fluid an active site to impart motion to ~~a constituent in~~ the fluid proximate to said sample active site.

39. (Previously presented) The method of claim 38, wherein said step of directing said acoustic field comprises, focusing said acoustic field to said at least one nucleation feature.

40. (Previously presented) The method of claim 38, wherein said step of directing said acoustic field comprises, adjusting a relative position between said acoustic source and said at least one nucleation feature to bring at least one nucleation feature within a focal zone of said acoustic source.

41-42. (Cancelled)

43. (Original) The method of claim 38, wherein said fluid contacts a first surface, and said first surface includes said at least one nucleation feature.

44. (Cancelled)

**DRAFT – for discussion purposes**  
**Application Serial No. 09/812,723**

45. (Original) The method of claim 43, wherein said first surface is a surface of a microchamber.

46. (Cancelled)

47. (Previously presented) The method of claim 43, wherein said at least one nucleation feature includes at least one of a pit, crevice, scratch, groove and ridge in said first surface.

48-50. (Cancelled)

51. (Original) The method of claim 43, wherein said fluid has a volume between about 0.1 pl and about 10 ml.

52-53. (Cancelled)

54. (Original) The method of claim 38, wherein said fluid is contained in a microchamber.

55-62. (Cancelled)

63. (Original) The method of claim 38, wherein said motion imparted to said fluid is of sufficient magnitude to cause a mixing action in said fluid.

64-67. (Cancelled)

68. (Currently amended) The method of claim 38 comprising, prior to said step of directing said acoustic field, positioning said at least one nucleation feature proximate to said sample an active site.

**DRAFT – for discussion purposes**  
Application Serial No. 09/812,723

69-76. (Cancelled)

77. (Currently amended) The method of claim 151, wherein said sample constituent is a biological sample.

78-112. (Cancelled)

113. (Currently amended) An apparatus for imparting motion to a fluid, said apparatus comprising,

an acoustic source for generating adapted to generate an acoustic field, which acoustic source has a source frequency of between about 10 kilohertz and about 100 megahertz, and

a controller adapted to control operation of said acoustic source, wherein said apparatus directs is further adapted to direct said acoustic field selectively to at least one nucleation feature located proximate to a sample located in the fluid an active site to impart motion to ~~a constituent in the fluid~~ proximate to said sample active site.

114. (Original) The apparatus of claim 113, wherein said acoustic source is further adapted to provide said direction of said acoustic field, and to provide said acoustic field as a focused acoustic field to said at least one nucleation feature.

115. (Currently amended) The apparatus of claim 113 further comprising, a positioning mechanism adapted adjust for adjusting a relative position between said acoustic source and said at least one nucleation feature, to bring said at least one nucleation feature within a focal zone of said acoustic source.

116-117. (Cancelled)

118. (Original) The apparatus of claim 113, wherein said fluid contacts a first surface and said at said first surface includes said at least one nucleation feature.

**DRAFT -- for discussion purposes**  
**Application Serial No. 09/812,723**

119. (Cancelled)

120. (Original) The apparatus of claim 118, wherein said first surface is a surface of a microchamber.

121. (Cancelled)

122. (Previously presented) The apparatus of claim 118, wherein said at least one nucleation feature includes at least one of a pit, crevice, scratch, groove and ridge in said first surface.

123-125. (Cancelled)

126. (Original) The apparatus of claim 118, wherein said fluid has a volume between about 0.1 pl and about 10 ml.

127-128. (Cancelled)

129. (Original) The apparatus of claim 113, wherein said fluid is contained in a microchamber.

130-136. (Cancelled)

137. (Original) The apparatus of claim 113, wherein said motion imparted to said fluid is of sufficient magnitude to cause a mixing action in said fluid.

138-141. (Cancelled)

**DRAFT – for discussion purposes**  
Application Serial No. 09/812,723

142. **(Currently amended)** The apparatus of claim 113, wherein said apparatus is further adapted to direct said acoustic field with sufficient specificity to promote mixing of a portion of said fluid proximate to said sample active-site.

143-150. **(Cancelled)**

151. **(Previously presented)** The method of claim 38, wherein said fluid is contained in a microvessel.

152. **(Previously presented)** The apparatus of claim 113, wherein said fluid is contained in a microvessel.

153. **(Currently amended)** The apparatus of claim 152, wherein said sample constituent is a biological sample.